Manual feedstuff shakerbox

With this feedstuff shakerbox you can determine what the particle size of feedstuff is. You can also check if grains are crushed enough for fermentation/ digestion. For Barley, Corn and Wheat we have extra information about the digestion.

Step 1: Shaking

- ✓ Pile up the sieves in alphabetical order with sieve A on top.
- ✓ Take 100 gram of concentrate.
- ✓ Divide into the top sieve
- ✓ Shake the particle separator as follows:
  - 5 x horizontally from front to back on a flat surface
  - Quarter turn en repeat movement
  - Repeat this procedure for about 1 minute

Step 2: Weighing

- ✓ Weighing the amount of feedstuff per sieve accurately with the scales
- ✓ Record the weights per sieve (A, B, C en D)
- ✓ Make the following calculation:

A+B+C+D=T(otal)

Convert to percentages:

A/T x 100%= % B/T x 100%= % C/T x 100%= % D/T x 100%= %

The recommendation is to have the biggest amount of feedstuff in sieve B and C.

Step 3: Calculation average particle size

To calculate the average particle size you must multiply the average particle size per sieve with the amount of feedstuff per sieve. To calculate the average particle size of the feedstuff, divide the "total (1)" with the "total grams (2)".

Sieve	Av. Particle size		Amount	Total
A	3	X	…. Grams	….
B	2,25	X	…. Grams	….
C	1,5	X	…. Grams	….
D	0.5	X	…. Grams	….
	Total:		(2)	(1)

Step 4: Digestion results (for ruminants)

Feed	Av. particle size	Quick fermentable Carbohydrates	Rumen starch fermentability	Intestinal digestible protein (DVE)
Barley	3	- -	- - (Bypass starch)	-
	2,25	-	-	+
	1,5	+	+	++
	0,5	++	++	++
Corn	3	--	-	- -
	2,25	-	- - (Bypass starch)	-
	1,5	+	-	+
	0,5	++	++	++
Wheat	3	- -	- - (Bypass starch)	-
	2,25	-	+	++
	1,5	+	+	++
	0,5	++	+	+

Source: Schothorst Feed Research